Amendments to the Specification:

Please amend paragraph [00079] as indicated below.

[00079]An embodiment of a second aspect of the invention comprises a level sensor

provided with mirrors having optical properties which are selected to minimize process

dependent apparent surface depression. For example, an embodiment of this aspect of the

invention may include a level sensor having metallic mirrors. Referring to figure 2, the level

sensor comprises a source S, a detector 5, and folding mirrors 2, 4. The folding mirrors 2,4

comprise comprising an Ag substrate with a Al_2O_3 coating, which are shown in more detail in

Figure 10 (other suitable coatings may be used). As shown in Figure 10, folding mirrors 2, 4

include Ag substrate 100 and Al_2O_3 coating 102. Coatings have been found by the inventors to

give rise to a Goos-Haenchen shift, the wavelength and polarisation dependency of the shift

being dependent upon the thickness of the coating. Therefore in this embodiment of the

invention the thickness of the Al_2O_3 coating of the mirrors used for the level sensor may be

selected to provide a minimized Goos-Haenchen shift. The appropriate thickness may be

dependent to some extent upon the processes that have been applied to the substrate 3. However,

it has been found that in general a coating of 275nm of Al_2O_3 provides favorable results. Other

coating thicknesses which provide favorable results are described below in relation to figures 7

to 9.

Please insert the following new paragraph after paragraph [00036]:

[00036.1] Figure 10 depicts the level sensor of Figure 2 in more detail than Figure 2.